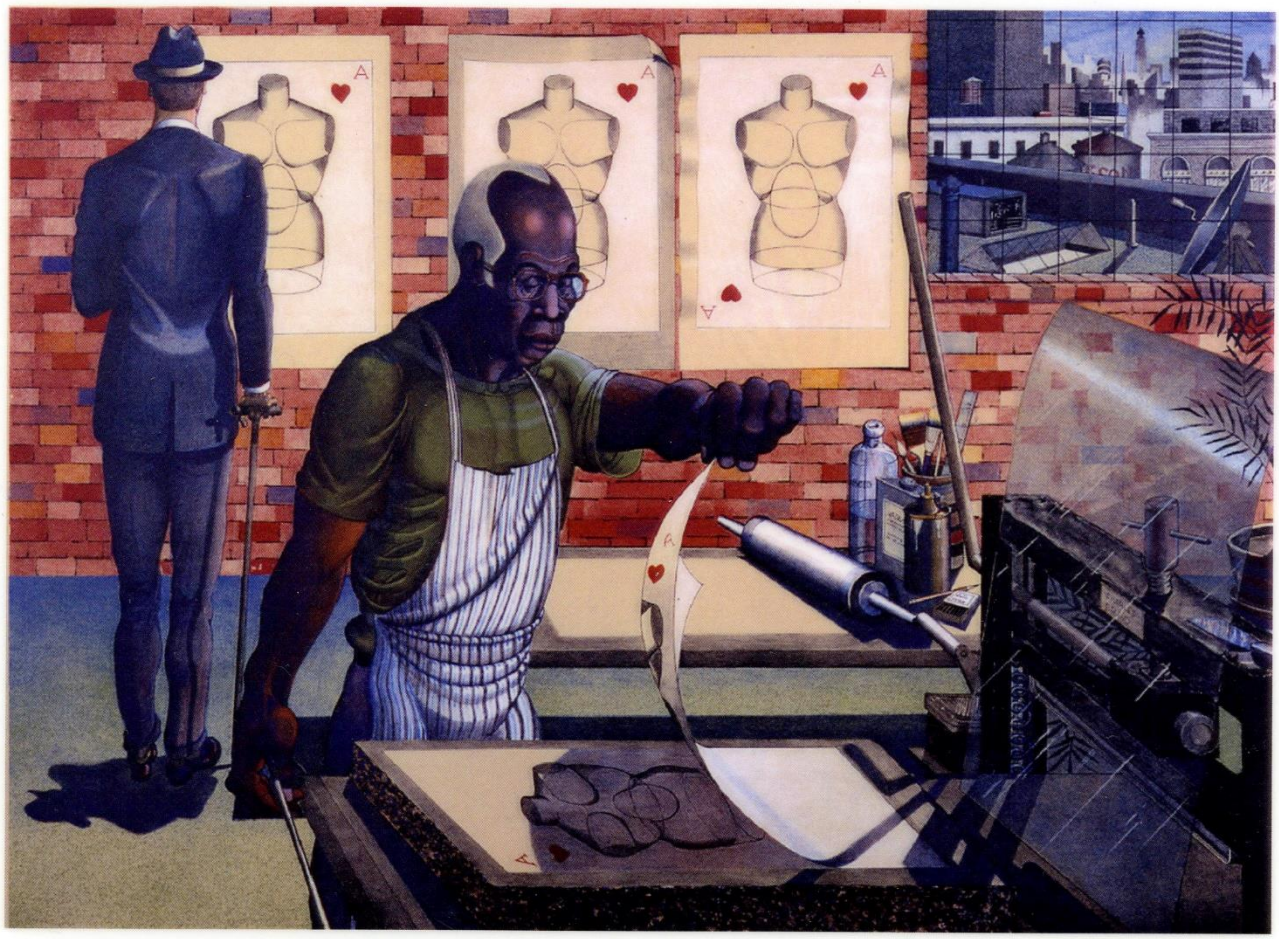
Toledo Museum of Art

UNDERSTANDING PRINTMAKING



Ron Adams, *Blackburn*, color lithograph, 2002. Frederick B. and Kate L. Shoemaker Fund, 2003.42 ©

The prints in the Works on Paper collection are shown in regularly changing exhibitions, rather than kept on permanent display. Works of art on paper are sensitive to light exposure—they can fade or discolor—and therefore their display time must be limited for preservation reasons. Also, the size of the collection—over 10,000 objects, including prints, drawings, photographs, pastels, and watercolors—means it is possible to display only a small portion of it at a time.

Multiple Works of Art

Printmakers can print (or pull) multiple, nearly identical images from a single block, plate, stone, or screen (the matrix). Therefore many collectors and museums can own the same image. The quality of prints pulled from a carved block or incised plate diminishes as the block or plate wears down from overuse. Sometimes artists use printmaking to work out variations on a theme—after printing a few images, the artist may add or remove lines or figures, use different colored inks, or print on a variety of papers or other materials.

Some Common Printmaking Terms

An **impression** is a single print from a matrix. A **state** is any stage at which impressions are pulled before the matrix is altered. Prints from the earliest stage are of the **first state.** An **edition** is the total number of impressions issued at a particular time. Artists sometimes **cancel** a plate in order to limit the number of impressions made from it. This is usually done by striking a line in the plate across the image. Impressions are sometimes pulled from cancelled plates, complete with defacing line.

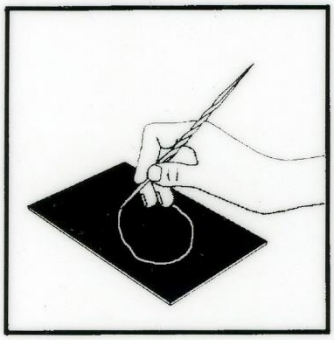
For more information on printmaking visit the Toledo Museum of Art Reference Library, located at the east end of the Museum building in the University of Toledo's Center for the Visual Arts.

Making Four Common Types of Prints

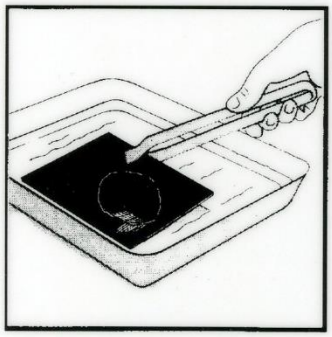
ETCHING

An etching is an **intaglio** print; the incised lines below the surface of the plate hold the ink. Intaglio prints leave a **platemark**—an impression of the edge of the metal plate.

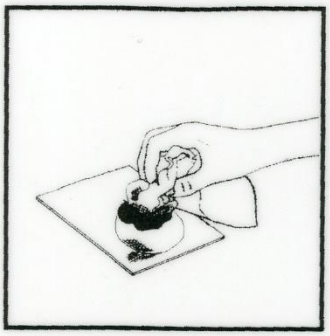
Some of TMA's great etchers: Rembrandt van Rijn (Dutch, 1606–1669), James Abbott McNeill Whistler (American, 1834–1903), and Pablo Picasso (Spanish, 1881–1973)



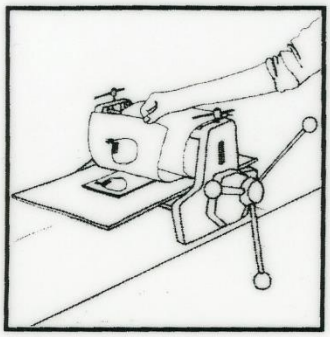
1. The artist covers a metal plate with a waxy coating (the ground), and then draws an image in the ground with an etching needle. As the needle scrapes through the ground, it exposes the metal plate beneath.



2. The plate is bathed in diluted acid. The acid "bites" into the metal exposed by the needle—but not into the acid-resistant ground—creating grooves. The longer the plate is left in the acid, the deeper the grooves; the deeper the grooves, the darker they will print.



3. After removing the ground, the artist rubs ink over the plate and into all the grooves. The artist then wipes the surface clean, so only the ink in the grooves is left.

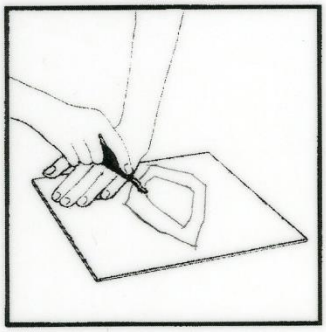


4. The artist places a sheet of damp paper on top of the plate and pads it with a blanket. The plate is rolled through the printing press. The damp paper is forced into the grooves of the plate, picking up the ink. The image is printed on the paper in reverse.

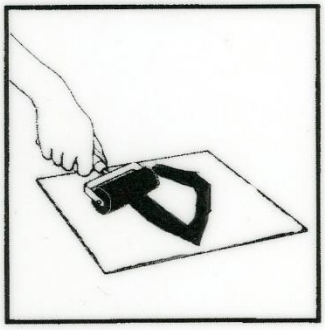
WOODCUT

A woodcut is a **relief** print; the raised, uncut surface holds the ink.

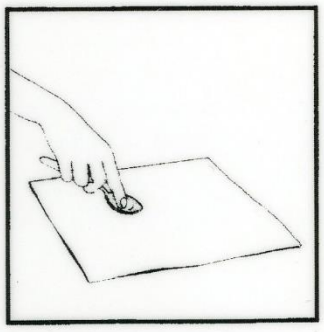
Some of TMA's great woodcut artists: Albrecht Dürer (German, 1471–1528), Hokusai Katsushika (Japanese, 1760–1849), and Joan Miró (Spanish, 1893–1983)



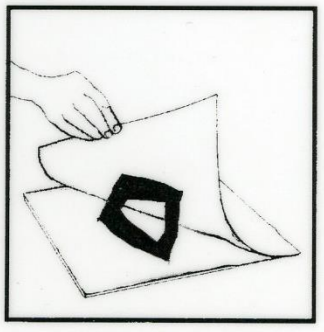
1. The artist uses woodworking tools to cut the image on a block of wood. The areas that are cut away will not print; the raised, uncut areas will print.



2. The artist rolls ink over the surface of the woodblock with a roller.



3. The artist places a sheet of paper on the carved, inked woodblock and rubs the back of it. The ink on the block transfers to the paper. A printing press can also be used for this step.



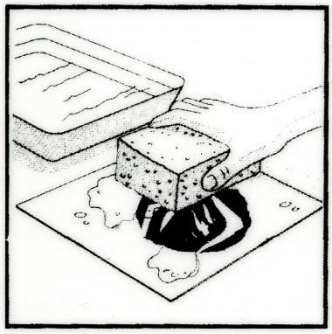
4. The image is printed on the paper in reverse. A linoleum cut is made much the same way, with a linoleum block instead of wood.

LITHOGRAPH

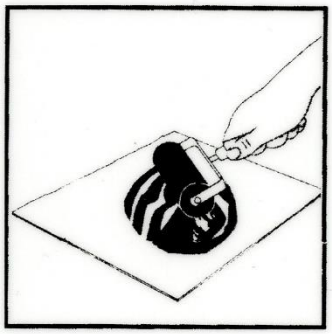
A lithograph is a **planographic** print; the flat surface of the stone or plate holds the ink.

Some of TMA's great lithographers: Henri de Toulouse-Lautrec (French, 1864–1901), Henri Matisse (French, 1869–1954), Jasper Johns (American, born 1930)

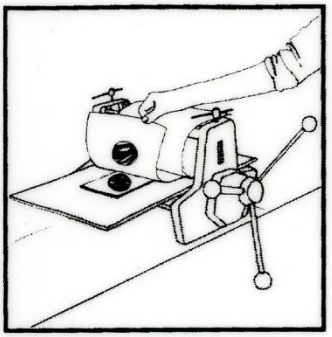
1. The printmaker draws or paints an image with greasy crayons or greasy ink called tusche onto a specially prepared slab of limestone or a metal plate.



2. The stone is treated with a mild chemical solution so that when it is inked for printing, the ink will adhere to the image drawn on the stone. The artist then uses turpentine to dissolve most of the tusche that was used to create the image. The grease of the tusche has soaked into the stone, leaving a ghostlike image of the design.



3. The stone is kept wet so that water collects on the areas around the image. Greasy ink is rolled onto the stone. The wet areas repel the ink, but it sticks to the ghostlike drawing.

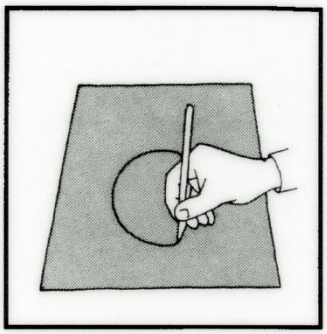


4. The artist places a sheet of paper on the stone, covers it with a backing sheet and a stiff board, and then runs it through a press. The image is printed on the paper in reverse.

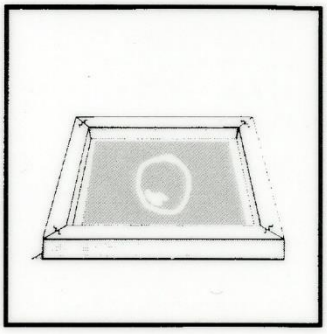
SCREEN PRINT

A screen print (also called a **silkscreen** or **serigraph**) is a **stencil** print.

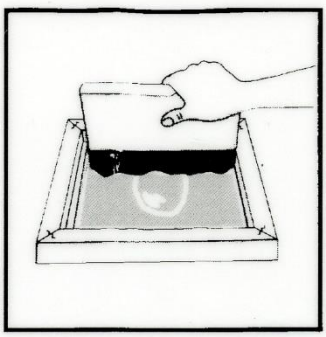
Some of TMA's great screen print artists: Andy Warhol (American, 1928–1987), Jacob Lawrence (American, 1917–2000), Kiki Smith (American, born Germany, born 1954)



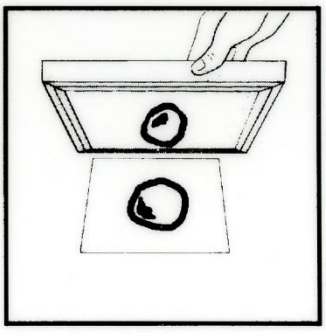
1. The artist cuts the shapes of an image in a sheet of paper or plastic to create a stencil.



2. The stencil is placed on a screen of silk or fine mesh stretched on a frame. The artist places the frame over a sheet of paper.



3. The artist puts ink on the screen and pulls a rubber squeegee across it. The ink is forced through the screen and the stencil onto the paper below.



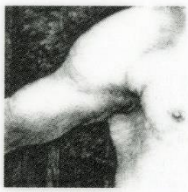
4. The stencil image is printed onto the paper. It is not in reverse.

Other Types of Prints

Relief

Wood engraving

The design is engraved with a sharp steel instrument, called a burin, on a block of hard wood cut across the grain. The density of the crosscut wood allows for lines more delicate than in a woodcut. Because the engraved lines are beneath the surface that carries the ink, they therefore print white.



Intaglio

Engraving

Lines are cut directly into a metal plate using a sharp metal tool (a burin). The burin cuts a triangular furrow, cleanly removing a thin strip of metal. The plate does not need to be bathed in acid to deepen the lines, as in etching (see previous pages).

Drypoint

Lines are scratched directly into a metal plate using an etching needle held like a pencil. This raises a ragged edge of metal called burr on either side of the line. The burr absorbs ink and prints as a soft, velvety tone. Often used with etching.

Aquatint

Powdered resin is dusted onto a metal plate that is then heated. The tiny droplets of resin melt and form an acid-resistant coating on the plate. The exposed metal around the resin is "bitten" in an acid bath, creating a pitted surface that prints as areas of grainy tone. Often used with etching.

Mezzotint

The surface of a metal plate is roughened with a serrated steel blade called a rocker to create rich texture and tone. Areas of the surface are then scraped and burnished smooth again so that they hold less ink and print as lighter tones and highlights.

Soft-ground etching

A metal plate is covered with a soft waxy coating (ground); then a sheet of thin paper is laid over it. The design is drawn on the paper with a pencil, pushing the lines into the ground and exposing the metal. The paper is removed and the plate is then bitten in acid as with a traditional etching (see previous pages).

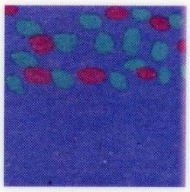
Chine collé

French for "adhered China paper." Pieces of thin textured China papers (often colored) are pasted to a sheet of paper that is placed, China paper side down, onto a metal plate with an etched design. When run through a press, the China paper becomes laminated to the sheet of heavier paper and is printed with the image from the plate. Also called chine appliqué.

Planographic

Transfer Lithograph

The image is drawn with greasy ink on a special type of paper. The paper is dampened and laid face down onto a heated lithographic stone, then passed through the press several times until the greasy drawing is transferred onto the stone. The image is then transferred to paper in the same way as a traditional lithograph (see previous pages). Unlike a traditional lithograph, the image is not printed in reverse.



Stencil

Pochoir

Shapes of the design are cut from thin sheets of metal or pieces of heavy card. Ink or paint is brushed over the stencil onto a sheet of paper, building up the color. A different stencil is used for each color in a multi-colored image. Sometimes used to color etchings or other types of prints.

Photographic

Cliché verre

French for "glass plate." A design is scratched through the soot on a smoked glass plate (or glass coated with a waxy ground). A sheet of light-sensitized paper is placed beneath the glass and together they are exposed to light, photographically
transferring the drawing to the paper.

Wood engraving: George G. Booth, from *The Dictes and Sayings of the Philosophers,* detail, wood engraving, 1901. Gift of Molly and Walter Bareiss, 1993.58, **Engraving:** Albrecht Dürer, *Adam and Eve,* detail, engraving, 1504. The Grace J. Hitchcock Collection, 1981.198, **Drypoint:** Mary Cassat, *Margot and Her Mother Seated on a Sofa,* detail, drypoint, 1901. Museum Purchase, 1945.38, **Aquatint:** Mel Bochner, from *Mel Bochner: Zeichnungen,* detail, aquatint, 1990. Gift of Molly and Walter Bareiss, 1990.84, © **Mezzotint:** Vija Celmins, from *The View,* detail, mezzotint, 1985. Molly and Walter Bareiss Art Fund, 1987.65, © **Soft-ground etching:** Edgar Degas, *Mary Cassatt at the Louvre: the Etruscan Gallery,* detail, soft-ground etching, drypoint, aquatint, and etching, 1879–80. Frederick B. and Kate L. Shoemaker Fund, 1955.22, **Chine collé:** Charles Meryon, after Karel du Jardin, *Three Swine in Front of a Stable,* detail, etching on chine collé, 1850. Museum Purchase, 1922.173, **Transfer lithograph:** Jules Pascin, from *Aus den Memoiren des Herrn Schnablewopski,* detail, transfer lithograph with added pochoir color, 1910. © Gift of Molly and Walter Bareiss, 1984.853, **Pochoir:** Georges Lepape, from *Les Choses de Paul Poiret, vues par Georges Lepape,* detail, lithograph with added pochoir color, 1911. Gift of Molly and Walter Bareiss, 1984.677 © **Cliché verre:** Eugène Delacroix, *Tigre en Arret,* detail, cliché verre, 1854. Gift of Ferdinand Roten, 1951.338.